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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/756,384

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Kwang-youb Lee

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EXAMINER

WRIGHT, INGRID D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,384

Applicant(s)

LEE, KWANG-YOUB

Examiner

Ingrid Wright

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 12-15, 19-21 and 29-38 is/are rejected.
7) ☒ Claim(s) 9-11, 16-18 and 22-28 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8,12-15,19-21 & 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pirdy et al. US 6151218 in view of Edlund US 5660065.

With respect to claim 1, Pirdy et al. teaches (Fig. 4) a portable terminal (10) having a terminal control section (342) and a bottom plate (not labeled), wherein the bottom plate (not labeled) includes a first connection terminal (130a) connected to the terminal control section (342) and a cradle (100) having a seating portion (110), on which the portable terminal (10) is seated, a second connection terminal (130) located in a position corresponding to the first connection terminal (130a) and a locking member (314,132,134) comprised of latches (132,134) and in a seating portion (110) and a locking element (314) based on locking member information and a cradle control section (127) and a locking member (314,132,134) in a position corresponding to a locking hole (22) or (24) (col. 4, lines 49-67) & (col. 5, lines 18-36).

Pirdy is silent as to a locking member, which rotates based on locking member information.

Edlund teaches a locking member (33), which rotates based on locking member information (see, col. 4, lines 16-28).

It would have been obvious to one of ordinary skill in the art at the time the information was made to utilize the locking member of Edlund in the invention of Pirdy, in order to provide a locking member capable of rotating in a clockwise or counterclockwise direction and to provide

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a locking arrangement capable of manipulated from a safety aspect (see, col. 4, lines 16-28 & col. 1, lines 48-61).

With respect to claim 2, Pirdy et al. teaches (Fig. 4) a bottom plate (not labeled) comprising a hole (22) and at least one additional hole (24) and a seating portion (110) comprising a locking member (314,132,134) and at least one additional corresponding locking member (314,132,134).

With respect to claim 3, Pirdy et al. teaches (Fig. 4,6,7) the locking member rotation information, which is created in response to the first and second connection terminals (130a, 130) being connected together after the portable terminal (10) is seated on the seating portion (110) and a request is made that the locking member (132,134,314) and the locking hole (22,24) be locked together.

With respect to claim 4, Pirdy et al. teaches (Fig. 6,7) an input part to allow a password to be inputted by a user to release the connection between the locking member (132,134,314) and the locking hole (22,24), wherein the locking member rotation information is created in response to the inputted password (col. 5, lines 52-67). T

With respect to claim 5, Pirdy et al. teaches the cradle control section (127) and the locking member (132,134,314).

Pirdy lacks a motor connected to a cradle control section.

Edlund teaches (fig. 4) a motor (40) and connected to the locking member (33), wherein the motor (40) is rotated when a recognition signal for the locking member rotation information is inputted.

It would have been obvious to one of ordinary skill in the art at the time the information was made to utilize the motor of Edlund in the invention of Pirdy, in order to provide a locking member capable of rotating in a clockwise or counterclockwise direction and to provide a

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locking arrangement capable of being manipulated from a safety aspect (see, col. 4, lines 16-28 & col. 1, lines 48-61).

With respect to claim 6, Piridy et al. teaches (Fig. 6,7) the first connection terminal (130a), which comprises a first control section connection terminal (344) that is connected to the terminal control section (342), the second connection terminal comprises a second control section connection terminal (344) that corresponds to the first control section connection terminal (344) and is connected to the cradle control section (127), and the recognition signal is transmitted from the terminal control section (342) to the cradle control section (127) through the first and second control section connection terminals (344) when the first and second control section connection terminals (344) are connected together.

With respect to claim 7, Piridy et al. teaches (Fig. 6,7) the first connection terminal (130a), which comprises a first control section connection terminal (344) that is connected to the terminal control section (342), the second connection terminal (130) comprises a second control section connection terminal (344) that corresponds to the first control section connection terminal (344) and connected to the cradle control section (127), and the recognition signal is transmitted from the terminal control section to the cradle control section (127) through the first and second control section connection terminals (344) when a password is inputted into an input part (col. 4, lines 1-8) (col. 5, lines 52-57).

With respect to claim 8, Piridy et al. teaches (Fig. 6,7) the locking member (314), the solenoid (332) and the cradle control section (127).

Piridy et al. lacks a motor controlled to stop the rotation of the locking member.

Edlund teaches (fig. 4) the motor (40) controlled to stop the rotation of the locking member (33).

It would have been obvious to one of ordinary skill in the art at the time the information was made to utilize the motor of Edlund in the invention of Piridy, in order to provide a locking member capable of rotating in a clockwise or counterclockwise direction and to provide a locking arrangement capable of manipulated from a safety aspect (see, col. 4, lines 16-28 & col. 1, lines 48-61).

With respect to claim 12, Piridy et al. teaches (Fig. 4) a cradle (100).

Piridy et al. is silent as to a polarity switching terminal.

Edlund teaches a polarity switching terminal (shown in fig. 4) connected to a motor (40) for switching polarities of the electric power applied to a motor (40) and the polarity switching terminal (shown in fig. 4) switches the polarities such the motor (40) rotates in a given direction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the polarity switching terminal as taught by Edlund in the invention of Piridy et al., in order to control the direction of the current flow to the locking mechanism.

Regarding the method claims 13-15, the method steps recited in the claims are inherently necessitated by the device structure as taught by Piridy et al. & Edlund. Piridy et al. & Edlund disclosed (Fig. 4,6,7) a portable terminal (10) and a cradle (100), wherein the portable terminal (10) comprises a terminal control section (342), a first connection terminal (130a) provided on a side of a bottom plate (not labeled) and connected to the terminal control section (342), and a locking hole (22,24) formed in the other side of the bottom plate (not labeled), and the cradle (100) comprises a seating portion (110) on which the portable terminal (10) is seated, a cradle control section (127), a second connection terminal (130) located in a position corresponding to the first connection terminal (130a) and connected to the cradle control section (127), a locking member (33) located in the seating portion (110) in a position corresponding to the locking hole (22,24), and a motor (40) connected to the locking member (33) to rotate the locking member

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(33) wherein locking member rotation information is created that is rotation request information of the locking member (33), a recognition signal is transmitted, the locking member rotation information is recognized by the terminal control section (342) and the recognition signal is transmitted to the cradle control section (127), a control signal for controlling the rotary motor (40) is outputted, the control signal based upon the recognition signal by the cradle control section (127), and the rotary motor (40) is driven according to the control signal, to rotate the locking member (33), wherein upon a request that the locking member (33) locking hole (22,24) be locked each other, the locking member rotation information is created in response to the connection of the first and second connection terminals (130a,130) after the portable terminal (10) is seated on the seating portion (110), wherein the locking between the locking member (33) and the locking hole be released is requested, the locking member rotation information is created in response to a password inputted through an input part connected to the terminal control section (342), the input part being provided in the portable terminal (10).

With respect to claim 19, Piridy et al. teaches (Fig. 4,6,7) at least one connection unit (130a, 130) to connect the portable terminal (10) to the cradle device (100) and a locking unit (132,134) having at least one locking member (314,132,134) to lock and unlock together the portable terminal device (10) and the cradle device (100) based upon at least locking member rotation information, wherein the locking member (314) is positioned corresponding to the at least one locking hole (22,24) (col. 4, lines 49-67) & (col. 5, lines 18-36).

Piridy et al. is silent as to the locking member (132,134,314) rotating.

Edlund teaches a locking member (33) that rotates (see, col. 4, lines 16-28).

It would have been obvious to one of ordinary skill in the art at the time the information was made to utilize the locking member of Edlund in the invention of Piridy et al., in order to provide a locking member cable of rotating in a clockwise or counterclockwise direction and to provide a

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locking arrangement capable of manipulated from a safety aspect (see, col. 4, lines 16-28 & col. 1, lines 48-61).

With respect to claim 20, Pirdy et al. teaches the locking unit further, which comprises a rotary solenoid located in the cradle device to control the rotation of the at least one locking member.

Pirdy et al. does not teach the locking unit comprising a rotary motor.

Edlund teaches (Fig. 4) a motor (40) to control at least one locking member (33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the motor and locking unit as taught by Edlund in the invention of Pirdy et al., in order to provide control for the movement of the locking member.

With respect to claim 21, Pirdy et al. teaches (6,7) an input part to allow a password to be inputted to release the connection between the locking member (132,134,314) and the locking hole (22,24), wherein the locking member rotation information is created in response to the inputted password (col. 5, lines 52-67).

With respect to claim 29, Pirdy et al. teaches (Fig. 4,6,7) the at least one connection unit (130a, 130), which comprises a plurality of connection terminals, including: first and second connection terminals (130a, 130) located respectively on the terminal device (10) and the cradle device (100), wherein the first and the second connection terminals (130a, 130) are connectable to each other and respectively transmit data information and signals between the terminal device (10) and the cradle device (100).

With respect to claim 30, Pirdy et al. teaches (Fig. 4) one of the plurality of connection terminals, which transmits and receives data information and a signal to an exterior device (col. 4, lines 1-12).

With respect to claim 31, Pirdy et al. teaches (Fig. 4) the exterior device, which is a computer

(col. 5, lines 5-9).

With respect to claim 32, Pirdy et al. teaches (Fig. 4) the exterior device, which is a power source (col. 4, lines 1-12).

With respect to claim 33, Pirdy et al. teaches (Fig. 4,6,7) a signal, which is transmitted from the terminal control section (342) to the cradle control section (127) in response to the connection of the first and second control section connection terminals (344).

With respect to claim 34, Pirdy et al. teaches (Fig. 4,6,7) a signal, which is transmitted from the terminal control section (342) to the cradle control section (127) in response to a password inputted into an input part.

With respect to claim 35, Edlund teaches a polarity switching portion (shown on fig. 4 of Edlund) to switch the polarity of electric power applied to a motor (40).

With respect to claim 36, Edlund teaches a first control signal is inputted and switches the polarity of the electric power to rotate the rotary motor (40) in a first direction (col.4, lines 16-28).

With respect to claim 37, Edlund teaches a second control signal is inputted and switches the polarity of the electric power to rotate the rotary motor in a second direction that is opposite of the first direction (col. 4, lines 16-28).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pirdy et al. US 6151218 and in view of Edlund US 5660065, further in view of Myers US 95959287.

With respect to claim 38, in regards to all the limitations of claim 19 above, Pirdy et al. as modified by Edlund, teaches (Fig. 4,6,7) the locking member (314,132,144).

Pirdy et al. as modified by Edlund, is silent to the at least one locking member formed in a "1" shape and the locking hole formed in bore shape.

Myers et al. teaches (Fig. 4) a locking member (56) formed as a "1" shape and the locking hole formed in a bore shape (see, for example, fig. 4 & col. 7, line 24-29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the locking member and locking hole as taught by Myers et al. in the invention of Pirdy et al. as modified by Edlund, in order to provide a securing means of the portable terminal with the cradle.

Allowable Subject Matter

6. Claims 9-11,16-18,22-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The allowability resides in the overall structure of the device as recited in dependent claims 9-11,16-18 & 22-28 and at least in part, because claim 9 recites: "a light transmission/reception hole," a light transmission/reception port is located on the cradle and position such that emitted light is reflected from the locking member through the light transmission/reception hole," and "a reflection plate reflecting the light to the bottom surface of the locking member, wherein the reflection plate is located on the cradle, and when a predetermined amount of light reflected from the reflection plate is received in the light transmission port, the rotary motor control signal is produced in the cradle control section based upon the amount of reflected light," claim 16, recites: "emitting light to the locking member so that the driving of the rotary motor is stopped depending on the reflected amount of the emitted light," and claim 22 recites: "light transmission/reception device." The aforementioned limitations in combination with all remaining limitations of claims 9-11,16-18, 22-28 are believed to render the claims and all claims dependent therefrom patentable over the art of record.

Response to Arguments

3. In regards to the Applicant's arguments, the locking member of Pirdy (314,132,134) does not rotate via the solenoid (332).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Romano US Re. 33873 shows the general state of the art regarding computer with locking device configurations.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IDW

**BORIS CHERVINSKY
PRIMARY EXAMINER**

Boris L. Chervinsky
2/21/6